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(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
(B) CLONE: U-U80

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

GGCACGAGGG ACAAGCGATG GCAGCAGAAAT TGTCTCCCAC GCTGAGCAAG AGCATCTTTG 60  
AAGGAGCCGG TGGATCTTAC TCTACTTGGT CAGGTGCCGA TCTCCCCCTT CTTACTGATG 120  
CAAAGCTCGG CGGAGGCAAG CTTGTCCTGA AACCACTGGG CTGGCGTTG CCTCACTATT 180  
CCGACTCATC GAAAGTCGGC TATGTTCTTG AAGGAAGAGC GGTGGTGGGG CTAACACTCT 240  
ATGGAGAGAC CGAGCAGAGG ATACTGCTGC TTGAGAAGGG AGATGTGGTA GCGGTGGTCA 300  
TGGGGAGCCT CACGTGGTGG TACAACGAGG AGGAGGACTC GACTTCTCC ATCGCCTTCT 360  
TAGGCGATAC CGGACAGCT GTGCGACCGG GCGACATCGC CTACTTCTTC TTGGCAGGAT 420  
CCCTAGGAAG TGCTCCATGG CTTTTCGACG GAAATTCCTC ANCAGGGCCT GCGGTTTAAG 480  
GGGATGCGGA AGCTGANGAG CTCTTCGGAA GCCAACCTGG TACTCTAATC ATCACACNGC 540  
AGCAAAAGCT GCCTGGCCTC AGANCATCCC GAGCTGACAG CNAAGGGATA TCNTAAACGC 600  
TGANGCGGTA NCGGCATATA TCAATGTGAA AAGTGGTGGC TGTTCTGCCT CGGTGACCCT 660  
TNATNAACTG GCNGCNCTGG GAAGATCAGG TTCTCCGTCN ACCTCCAAAA ATCCANCCTA 720  
ACCCCGTGCC TTGCCGGGGT TCTTCNTTGA ATCNNCTGTT CANCTGAAAT TTTTCCCCAA 780  
GGCCNTGGAA CAATTCT 797

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 742 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
(B) CLONE: U-U90

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

GGCACGAGAT GACTCTCTCG GCGGTAGCAT CGGATGCCGA TGATTCGGTC GCTTATACAT 60  
TCGCTTCGCG ATACGTTGCG GAGGCTCTTC CCCGGTTCAG GATACCGGAG CAGTCGATCC 120  
CCAAGGATGC GGCGTACCAG ATCATCAACG ACGAGCTGAT GCTCGACGGG AACCCGCGGT 180  
TGAATCTGGC GTCGTTCTGT ACGACGTGGA TGGAGCCGGA GTGCGATCGC CTCATCATGG 240  
CGGCCGTCAA CAAGAACTAC GTCGACATGG ACGAGTACCC CGTCACCACC GAGCTCCAGA 300  
ATCGCTGCGT AAATATGATA GCCCACCTTT TCAATGCCCC AATTGGGGAA NACGAAACGG 360  
CTGTTGGAGT TGGAACTGTG GGTTCCTCCA GAAGCAATCA TGCTTGACAGG ACTTGCAATC 420

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AAGAGGAAAT GGCAGAACAA AAGAAAGGCA GAGGANAAGC CTTACGACAA ACCCAACNTT 480  
 GTTACCGGTG CAAATGTTCA GGTCTGCTGG GANAAATTTG CAAGGTATTT TGAAGTTTGA 540  
 ACTGAAAGAA ATTGAAGTTG AAAGAAGGAT ATTATGTTAA TGGATCCTGC CAAGGCAGTA 600  
 NAAATGGTTG ATGAAAAATA CATATGTTTT TGCTGCCATC TTTGGGTTCA ACTCTCCCTG 660  
 GGAAATTTG AANATGTTAA CCTTCTAAAT GATCTCCTGA CNGAAAAAAA CCCAGAAACT 720  
 GGGTTGGACC CCCNTACTT GT 742

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 807 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
 (B) CLONE: U-U92

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

GGCAGGAGCT CTAGCCGATG ACTCTCTCGG CGGTAGCATC TGATGCCGAT GATTCGGTCG 60  
 CTTATACATT CGCTTCGCGA TACGTTGCGG AGGCTCTTCC CCGGTTTCAGG ATACCGGAGC 120  
 AGTCGATCCC CAAGGATGCG GCGTACCANA TCATCAACGA CGAGCTGATG CTCGACGGGA 180  
 ACCCGCGGTT GAATCTGGCG TCGTTCGTGA CGACGTGGAT GGAGCCGGAG TGCGATCGCC 240  
 TCATCATGGC GGCCGTCAAC AAGAACTACG TCGACATGGA CGAGTACCCC GTCACCACCG 300  
 AGCTCCAGAA TCGCTGCGTA AATATGATAG CCCACCTTTT CAATGCCCCG ATTGGGGAAN 360  
 ACNAAACGGC TGTTGGAGTT GGAAGTGTGG GGTCTCAAA AGCAATCATG CTTGCAGGGC 420  
 TTGCATTCAA GAGGAAATGG CANAACAAA GAAAGGCAGA GGANAAGCCT TACGACAAAC 480  
 CCAACATTGT TACCGGTGCA AATGTTCTNGG TTTTGCTGGG AANAAATTTG CAAGGTATTT 540  
 TGAAATTTGA ACTGANAGAA NTGAANTTGA AAGAAGGATA TTATGTTTAT GGATCCCNGC 600  
 CCAAGGCAGT ANAAATGGTT GATGAAAATA CCAATTTNTG TTGCTTGCCC ATCTTTGGGT 660  
 TCCACTCTCN CTGGGANAAT TTTGAAAAT GTTNAGCTTC TAAATGATCT CCNGGACCNA 720  
 AAAAANNCCC NNAANCTNGG TTGGGACCCC CCCNTACCTT TTCNATNCCT GCCANTTNGG 780  
 GGATTCNNTA NCGCCTTTCC TNCTATC 807

(2) INFORMATION FOR SEQ ID NO: 22:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 770 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:

(B) CLONE: U-U91

## 5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

GGCACGAGAG AAAAAATTGT AAAGTTTGAC TTTTCATGGAC AGCCTGCGGA GCTCAAGCAT 60  
GGTAGCCTTG TCATAGCAGC AATTACAAGC TGCACAAACA CATCAAATCC CAATGTTATG 120  
10 CTTGGTGCTG GTCTTGTTGC AAAGAAGGCC TGTGAATTAG GTCTACAGGT TAAGCCTTGG 180  
ATCAAAACCA GCCTTGCTCC AGGTTCTGGA GTTGTACCA AGTATTTGCT TAAGAGTGGC 240  
15 CTACAAGAAT ATTTGAATCA GCAAGGATTT AATATTGTTG GGTATGGCTG CACAACATGT 300  
ATCGGAAACT CTGGGGATCT TGATGAGTCT GTGGCTGCTG CAATTTCCGA TAATGATATA 360  
GTTGCTGCTG CTGTTCTATC TGGAATAGG AATTTTGAGG GACGTGTGCA TCCATTGACA 420  
20 CGAGCTAACT ATCTTGCTTC ACCTCCGCTT GTTGTAGCTT ATGCGCTTGC TGGAACAGTT 480  
GACATTGATT TTGAAAAAGA ACCCAATTGG AACAGGGGAA GGATGGGAAA AAACATATAC 540  
25 TTCCAGGATA TATGGCCGTC CACTGAANAA ATTGCACAGG TTGTGCAATC CANTGTTTTT 600  
GCCTGAAATG TTCAAGAATA CCTATGAAGC AATCACCAAA GCACCCTATG TTGGAACCAA 660  
CTGACTGTTC CCNGCCACAC TCTTTATTCA TGGGACCCAA TCCNCNTACA TCTTAACCAC 720  
30 CNTATTTTAA GGANATGACC ATGGCCCNCC TGTCNCATG GGGTGAAAAA 770

## (2) INFORMATION FOR SEQ ID NO: 23:

35 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 810 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: unknown

40 (ii) MOLECULE TYPE: cDNA

(vii) IMMEDIATE SOURCE:  
45 (B) CLONE: U-U96

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

50 GGCACGAGAG GGCCGTTTCCT TTTTGTGCTC GCTTTGCTGC CTCCTCGTTC GTCTTTTCCG 60  
CGAATTTTAC CGGCCATGAA CAGCCTTCGG AGCCTTCCGA CATCCTCCGC TCCGCCCTCG 120  
55 CCGGTCCCGA GAGGACGTTT GAGTAGGCCA CCGACCTTGA ATCTGGGGGT GATACGACCA 180  
CATCATCTTC GTGTAAATGT CGCCAGGAGT GCATGTTCCA AGTCTTCTGC AAGTCCTGAG 240  
AAGACTGGTG CTGAAGTGCA AGATCAGAAG TCTGAGATAT ATAGCAGTGA TATGACAAAA 300  
60 GCAATGGGTG CAGTGCTGAC ATATAGGCAT GAGCTTGGAA TGAATTATAA TTTCATCTAC 360  
CCAGGATTGA TTGTTGGTTC TTGTCTACAG ACCCATCAG ATGTTGATAA GCTTCCNAAA 420  
65 GATTGGGGTT GAAGACCATC TTTTGTCTGC AGAAGGACTC GGATCTTGA ATATTTTGGG 480  
GTTGAAATTG GTGCAATTCC NTGAATATGC CATGCAATGT GGTGACATTG AACATCTTCN 540  
TGCTGAAATC AGGGATTTTG ATGCATTGA TTTGAAGATG ANACTTCCTG CNGTANTTAC 600  
70 NAATTATACA AGGCTAATTA ATCCGAATGG TGGAACTACT TATTTTCNCT GTACANCCNG 660